

system may be integrated into the signal flow pattern to eliminate any image forming errors caused by the optics and projection.

5

## What is claimed is:

- A method of defining and at least partially correcting errors of an image reproduction system, comprising the steps of:
   determining the parameters of a neuronal net by a learning process utilizing a test image of predetermined quality as a learning pattern; feeding data representative of an image to be reproduced to the neuronal net for processing in accordance with the parameters; operating an image forming device on the basis of the data processed by the neuronal net.
  - 2. The method of claim 1, wherein the neuronal net is implemented in a computer.
- 20 3. The method of claim 1, wherein the neuronal net is implemented in an application specific circuit.
- The method of claim 1, wherein the neuronal net is trained by data derived from an uncorrected digitized test image provided by the image forming device and wherein the target data is derived from digitized data of the original image to be reproduced.
  - 5. The method of claim 1, wherein the parameters of the neuronal net are values derived from an image forming system the quality of image formation of which substantially corresponds to the image forming quality

30





of the image forming system to be corrected.

- 6. The method of claim 1, wherein the neuronal net is a mono-layered one of linear transfer function.
- 7. The method of claim 1, wherein the errors relate to color channels and wherein the correction of N color channels requires adding of the outputs of N² neuronal nets.
- An apparatus for correcting image forming data, comprising:
  a neuronal net implemented on a predetermined circuit and comprising
  parameters established by a learning process on the basis of a test image
  of predetermined quality, the output of the neuronal net being connected
  to the inputs of an image forming device;
- a storage for image data to be reproduced and connected to the inputs of the neuronal net; and an image recording device for generating digital date of an uncorrected image of a test image provided by the image forming device and connected to the inputs of the neuronal net during the learning process for defining the parameters.
  - 9. The apparatus of claim 8, wherein the image recording device is connected to the inputs of the neuronal net through an image data storage.
  - 10. The apparatus of claim 8, wherein the image forming quality of the image recording device is superior to the image reproducing quality of the image reproducing device.

30

25

5